

**St. Xavier's College (Autonomous), Kolkata**  
**M. Sc (Computer Science)**  
**CMSM4356 (Group B) – AI Lab**  
**Continuous Internal Assessment**  
**Date: 30/09/2021**

**Marks: 10**

**Duration: 30 minutes**

**Answer question 1 and any one from the remaining two.**

1. Write a Prolog program to represent the following facts and clauses :
  - a) Marcus was a man.
  - b) Marcus was a Pompeian.
  - c) Marcus was born in 40 A.D.
  - d) All men are mortal.
  - e) All Pompeians died when the volcano erupted in 79 A.D.
  - f) No mortal lives longer than 150 years.
  - g) It is now 2021.
  - h) Alive means not dead.
  - i) If someone dies then he is dead at all later times.

**[6]**
2. Write a Prolog program to find whether a list is a palindrome or not.

**[4]**
3. Write a Prolog program to divide a given integer list into two sublists depending on an input, N given by the user where all numbers less than N should be put in list - L1 and rest in list-L2.

**[4]**